

# Study Findings- Amended

---

At the request of Collin County, four alignments were re-evaluated for Segment 3 of the Collin County Outer Loop between SH 289 and FM 2478 against the approved project criteria. These evaluations are provided below along with an updated alignment matrix.

## SH 289 to FM 2478

At the August 1, 2011 Public Hearing, Collin County Commissioner's Court approved the alignment for all of Segment 3 of the Outer Loop with the exception of the section between SH 289 (Preston Road) and FM 2478. The court proposed a new alternative, the yellow alignment, a combination of both the brown and orange alignments. This alternative was proposed to minimize the number of homes that would be affected by the Outer Loop, as well as locate the alignment nearest the ROW that has already been dedicated or has the potential to be dedicated for the Outer Loop. At a subsequent property owner's meeting on September 19, 2011 at the Collin County Administration Building, a fourth alignment alternative, the purple alignment, was considered. This alignment was considered to avoid all of the homes on the north side of County Road 88 near the Summerview Estates subdivision that the other alignments conflicted with. From SH 289, the purple alignment runs east along CR 88 and then turns north to avoid the Oncor substation that is located on the south side of CR 88 and then ties into the previously adopted alignments.

With respect to evaluating each alignment alternative, accessibility is rated equally for all of the alternatives. The brown and orange alignments are rated higher with respect to safety than the yellow and purple alignments due to the sharpness of the horizontal curves (smaller radii) and the super elevation required for cars to travel safely at highway speeds. Construction costs are rated equally and are similar at this preliminary stage of project development for all of the alignment alternatives.

ROW acquisition is scored generally positive for all of the alignments with each route aligning with dedicated or potentially dedicated ROW. The yellow alignment does align with the greatest amount of ROW that is willing to be dedicated. This provides the yellow alignment with the highest ranking of all of the alternatives.

Each of the alternatives affect properties and homes, the number of properties affected by each alignment are twenty-two for purple; seventeen for yellow; sixteen for orange; and sixteen for brown. Each of the alignments affect one common residence while also affecting others: three for brown; and two each for yellow, orange, and purple. Using the basis of appraised property values provided by the Collin Central Appraisal District, appraised structure values for the number of structures along each route is approximately: \$500,000 for each brown, yellow, and orange and just over \$300,000 for the purple route. Accordingly, the purple alignment is rated the highest with the brown rated the lowest in regard to properties and structures affected.

The acreage of ROW needed for each alignment is generally the same, with the yellow requiring the largest amount of ROW. This however is less than 5% more than the alignment requiring the

least ROW, the brown alignment. ROW has been dedicated (but not recorded) from the Carter Ranch development along the brown, purple, and yellow alignments amounting to dedications of 12, 12, and 10 acres respectively. However, landowners have verbally committed to potentially dedicating 32 acres of ROW along the orange and yellow alignments. To date, there have not been any landowners come forward and propose potential dedications on the purple or brown alignments. Thus, the yellow alignment ranks highest when pertaining to ROW as it has the potential to have the most ROW dedicated.

Utilities and Infrastructure are generally rated neutral with the exception of the purple alignment. The purple alignment is ranked negatively in this category as aligning the Outer Loop along the purple route will cause conflicts with two large Oncor transmission towers located along CR 88 and perhaps conflict with an Oncor substation that is located on the southern side of CR 88.

The brown route rates the highest with respect to compatibility with other projects as it provides easy accessibility to the new Collin County College campus. The yellow and orange alignments make accessibility to the campus more difficult; furthermore, the purple alignment is located on the property where the campus will be built and has the potential to conflict with the campus.

The input from the public is negative for all of the routes in this section of the Outer Loop. It is the most negative for the brown alignment and slightly less negative for the orange alignment. With the addition of the yellow and purple alignments after the completion of the Public Involvement process, formal public input has not been provided and thus the yellow and purple alignments cannot be rated or ranked against the other alternatives.

All alignment alternatives received equal scores for socio-economic, neighborhood, and noise impacts due to their proximity to Carter Ranch, Summerview Estates, and other homes in the area.

Natural impacts were generally equal for all of the alignments, with the exception of the purple alignment that transverses across a very large stock tank. There are no discernable differences between the alignment alternatives in regard to cultural impacts and hazardous materials.

The City of Celina, a project stakeholder has indicated its preference for the brown alignment over the orange alignment but has not provided any input with respect to the yellow or purple alignments. With no stakeholder input for the purple and yellow alignments, this category cannot be rated equitably.

## CCOL Segment 3 - SH 289 to FM 2478

Category	Criteria	Alternatives			
		Alternative 1 (Brown)	Combined Alternative 2 (Yellow)	Alternative 3 (Orange)	Alternative 4 (Purple)
Enhanced Mobility and Safety	Accessibility	O	O	O	O
	Safety	O	-	O	-
Cost Effectiveness	Construction Cost	O	O	O	O
	ROW Acquisition	+	++	+	+
	Number of Properties Affected	16	17	16	22
	Number of Structures	3	2	2	2
	Total Structure Appraised Value (Approx.)	\$1,013,000	\$547,000	\$547,000	\$325,000
	Acres of ROW Needed (Approx.)	184	191	186	185
	Acres of ROW Dedicated Along Route (Approx.)	12	10	0	12
	Potential Additional Dedication Along Route (Approx.)	0	32	32	Incomplete
	Utilities and Infrastructure	O	O	O	-
Engineering Feasibility	Compatibility with Other Projects	O	-	-	-
Environmental Impacts	Public Input	--	-	-	Incomplete
	Socio-Economic and Neighborhood Impacts	-	-	-	-
	Noise Impacts	-	-	-	-
	Natural Impacts	O	O	O	-
	Cultural Impacts	O	O	O	O
	Stakeholder Input	++	Incomplete	--	Incomplete
	Hazardous Materials	O	O	O	O